

## **AUDIO-ONLY BACKOFF IN AUDIO-VISUAL SPEECH RECOGNITION SYSTEM**

### **Abstract of the Disclosure**

Techniques for performing audio-visual speech recognition, with improved  
5 recognition performance, in a degraded visual environment. For example, in one aspect  
of the invention, a technique for use in accordance with an audio-visual speech  
recognition system for improving a recognition performance thereof includes the  
steps/operations of: (i) selecting between an acoustic-only data model and an  
acoustic-visual data model based on a condition associated with a visual environment;  
10 and (ii) decoding at least a portion of an input spoken utterance using the selected data  
model. Advantageously, during periods of degraded visual conditions, the audio-visual  
speech recognition system is able to decode (recognize) input speech data using  
audio-only data, thus avoiding recognition inaccuracies that may result from performing  
speech recognition based on acoustic-visual data models and degraded visual data.